# Attributes

* departmentName
* departmentAbbrevation
* programmeName
* programmeAbbrevation
* branchName
* studentName
* studentIDNbr
* studentLoginID
* courseCode
* courseCredits
* courseName
* courseCapacity
* courseCategory
* courseIsQueueable
* placeInQueue
* grade
* coursePrerequisites

**departmentName -> departmentAbbrevation**

**departmentAbbrevation -> departmentName**

Violating 3NF. But departmentAbbrevation and departmentName cannot be both part of the key so departmentName will still be the key but departmentAbbrevation is unique.

**programmeName -> programmeAbbrevation**

The name of the programme will be shortened to a abbrevation. A programme will have a unique name but the abbrevation is not neceraily unique.

**studentLoginID -> programmeName branchName studentName studentIDNbr**

Does not violate any normalforms. studentLoginID is a key and so is programmeName and branchName, the rest are nonkeys.

**studentIDNbr -> studentLoginID**

Violates 3NF but studentIDNbr is unique in a higher sense than studentLoginID. We cannot edit the value of a studentIDNbr but we can choose the value of studentLoginID which will also be unique at the university and is choosen from the students name and/or ID number. (Two students cannot have identical usernames). If we add the fact that passing unisserarily around a persons ID number around on the internet question of privacy we chose to have studentLoginID as a key and the studentIDNbr as unique.

**studentLoginID courseCode -> grade**

Does not violate any normalforms. Looks identical to the ”Completed” relationship in our schema.

**courseCode -> courseName courseCredits courseCategory**

Does not violate any normalforms. courseCode is a key and the rest are nonkeys.

**courseCode courseIsQueueable -> courseCapacity**

Does not violate any normalforms. If we know a courseCode and if it is queueable it will have a courseCapacity. If the course is not queueable it should not have a capacity.

**studentLoginID courseCode courseIsQueueable -> placeInQueue**

Does not violate any normalforms. If we know a studentLoginID and a courseCode and if it is queueable, we will know if the student has a place in the queue or not.